

KRAUS, Alois, inz.

Technology and economy in construction of the Orlik Waterworks.
Inz stavby 11 no. 12: 441-472 D '63.

1. Statni komise pro rozvoj a koordinaci vedy a techniky,
Praha.

POMERANTS, Ye. D.; KRAUS, A.G.

Cases of poisoning connected with the redecoration of apartments. Gig.
1 san. 23 no.12:77-78 D '58. (MIRA 12:1)
(ANILINE--TOXICOLOGY)

NR 115, B.

36

PHASE I BOOK EXPLOITATION

SOV/5799

Unksov, Ye.P., Doctor of Technical Sciences, Professor, Ed.

Sovremennoye sostoyaniye kuznechno-shtampovochnogo proizvodstva (Present State of the Pressworking of Metals) [Moscow] Mashgiz, 1961. 434 p. 5000 copies printed.

Ed. of Publishing House: A.I. Sirotin; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on the Hot Working of Metals: S.Ya. Golovin, Engineer.

Title: Kuznechno-shtampovochnoye proizvodstvo v SSSR (The Pressworking of Metals in the USSR) by: A.V. Altykia, D.I. Berezhkovskiy, V.F. Volkovitskiy, I.I. Girsh (deceased), L.D. Gol'man, S.P. Granovskiy, N.S. Dobrinskiy, A.I. Zinin, S. L. Zlotnikov, A.I. Kagalovskiy, P.V. Lobachev, V.N. Martynov, Ye.N. Moshnin, G.A. Navrotskiy, Ya.M. Okhrimenko, G.N. Rovinskiy, Ye.A. Stosha, Yu.L. Rozhdetsvenskiy, N.V. Tikhmirov, Ye.P. Unksov, V.F. Shecheglov, and L.A. Shofman; Eds: Ye.P. Unksov, Doctor of Technical Sciences, Professor, and B.V. Roznov.

Title: Kuznechno-shtampovochnoye proizvodstvo v ChSSR (The Pressworking of Metals in the Czechoslovak SR) by: S. Burda, F. Hrazdil, F. Drastik, F. Zlatohlavek

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Present State of the (Cont.)

SGI/5799

Z. Nejvel, V. Kraus, P. Kupka, F. Majer, K. Marvan, J. Novak, J. Ockhal, K. Paul, B. Scher, M. Hont, J. Čadka, V. Šindler, and J. Šolc; Eds.: A. Nejepsa and M. Vlk.

PURPOSE: This book is intended for engineers and scientific personnel concerned with the pressworking of metals.

COVERAGE: Published jointly by Mashgin and SMTL, the book discusses the present state of the pressworking of metals in the USSR and the Czechoslovak Socialist Republic. Chapters were written by both Soviet and Czechoslovak writers. No personalities are mentioned. There are 129 references: 98 Soviet, 16 English, 8 German, 5 Czech, and 2 French.

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Ch. I. The Characteristics of Forging Shops in USSR Plants (A.I. Zimin and Ye.P. Unksov)

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Ch. II. Methods of Calculating the Pressure for Forging in the Pressworking

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Present State of the (Cont.)

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Card 7/8

KRAUS, Bohumil, inz.

Use of plasma in metallurgy. Hut listy 18 no.3:199-202 Mr '63.

KRAUS, E.

①
Fast dyeing of wool. E. Kraus (*Prak. Chem.*, 1954, 5, 39—
41).—After a survey of the merits and defects of the various types
of vat and mordant dyes hitherto used for dyeing wool, the
advantages of recently-introduced weakly-acid metal-complex
dyestuffs, including improved fastness, especially to light, stability,
level dyeing, etc., are described. Their affinity for silk and
artificial fibres such as nylon makes them suitable for mixtures of
these with wool.

M. TADMAN.....

KRAUS, E.

246. Determination of 4-n-butyl-1,2-diphenylpyrazolidine-3,6-dione (phenylbutazone). A. E. Jančík, E. Kraus, B. Bucháček and J. Čížková (Inst. Pharm. and Biochem., Prague, Czechoslovakia). *Časopis. Farm.*, 1957, 6 (2), 105-108. The method is based on the addition of Br to the double bond of the enol form of phenylbutazone (I). *Procedure*—The sample (500 to 300 mg of I) is dissolved in glacial acetic acid (30 ml), HCl (5 ml) and 20% KBr (5 ml), and titrated with 0.1 N KBrO₃. The end-point is determined potentiometrically. A semi-micro determination can be carried out with 0.01 N KBrO₃. If an excess of 0.1 N KBrO₃ (25 ml) is added, the free Br is removed by 1% aniline soln. (5 ml) and, after 5 min., KI (1 g) is added, and the KBrO₃ is determined by titration with 0.1 N Na₂S₂O₃ (starch as indicator). Before the end-point is reached, the soln. should be diluted to 50 ml with H₂O. An iodimetric titration with ethanolic 0.1 N NaOH (to phenolphthalein) is possible. J. Vojtek

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1-4E3d
1-4E4j

1/1

CZECHOSLOVAKIA/Analytical Chemistry. General Questions.

E-1

Abs Jour:Ref Zhur-Khim., No 13, 1958, 42989.

Author : I. Korbl Jiri, Pribil Rudolf
II. Korbl Jiri, Kraus Eduard, Jancik Fedir, Pribil Rudolf.

Title : Metallochromatic Indicators. I. Preliminary Communication. II. 3,4-Dihydroxy-4'-Nitroazobenzene and 3,4-Dihydroxy-Azobenzene-4'-Sulfonic Acid as Simple Metallochromatic Prototypes of Pyrocatechol Violet.

Orig Pub: Chem. listy, 1957, 51, No 2, 302-310; 311-314; Sb. chekhosl. khim. rabot, 1957, 22, No 4, 1122-1130.

Abstract: I. Indicators used in complexometry can be subdivided into 3 groups: 1) Colorless compounds which produce a characteristic color with definite cations, the chromophore being in this

Card : 1/5

CZECHOSLOVAKIA/Analytical Chemistry. General Questions.

E-1

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42989.

case the deformed cation (salicylic and sulfo-salicylic acid, tyron, NH_4SCN , KI, thiourea); 2) Substances which produce with certain cations a turbidity or strongly colored adsorption products (oxalic acid, gallocyanianin); 3) Organic dyestuffs capable of forming complexes with a sharp change in color (murexide, Eriochrome Black T, Pyrocatechol Violet (I), Pyrogallol Red, Xylenol Orange, etc.). Substances of the last mentioned group must be regarded as complexometric indicators in the direct meaning of the term; they are being designated as "metallochromatic indicators" (MI). All MI have the properties of acid-base indicators and also include complex-forming groups which are a part of

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CZECHOSLOVAKIA/Analytical Chemistry. General Questions.

E-1

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42989.

the resonance system of the indicator. The range of color change of MI, on formation of a complex with the cation is within the limits of its acid-base changes. The functional mechanism of MI ensues from its complex-forming characteristics and its properties as an acid-base indicator. In the presence of the cation with which the MI forms a complex, there takes place, within the pH range of the complex occurrence, a disturbance of the acid-base color change of the MI; it is desirable that this disturbance be associated with sharp color changes within the pH range that is advantageous for the determination of the given cation. The function of MI depends upon its color system, acid-base properties, the complex-forming group, and

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CZECHOSLOVAKIA/Analytical Chemistry. General Questions.

E-1

Abs Jour: Ref Zhur-Khin., No 13, 1958, 42989.

the effect of the other substituents. The properties of suitable MI are determined from this standpoint. II. By coupling of diazotized p-nitraniline or sulfanilic acid were prepared 3,4-dihydroxy-4'-nitro-azobenzene (II) and the Na-salt of 3,4-dihydroxy-azobenzene-4'-sulfonic acid (III), which are the simplest forms of MI of I type. MI II and III can be utilized for complexometric determination of the same cations which are determined with I. All 3 indicators have the same complex-forming groups, as a result of which they differ from one another only in range and pH interval of color changes on formation of complexes with the cations. On determination of Bi with III better results were obtained than with I. The

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CZECHOSLOVAKIA/Analytical Chemistry. General Questions.

E-1

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42989.

titration of small amounts of Th, and also of Zn, Cd, Co and Ni at pH of about 10 can be readily effected by the use of III. For determination of Cu, Ca, etc., in strongly alkaline media, II can be successfully utilized. The synthesis of II and III is very simple and occurs with a high yield.

Card : 5/5

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Organic Substances.

E-3

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57240.

Author : Knobloch E., Jancik F., Janata V., Kraus E., Nem-
cova D., Bacik Z.

Inst : Not given.

Title : Determination of Phytol and Phytodiene and Synthe-
sis of Pure Substances.

Orig Pub: Chem. listy, 1957, 51, No 7, 1379-1381.

Abstract: In the quantitative determination of Phytol (I) by
infra-red spectrum method, absorption at 3360cm^{-1}
(in CCl_4) and at 990cm^{-1} (in chloroform) are mea-
sured. For Phytodiene (II) the measurements are

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CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Organic Substances.

E-3

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57240.

Abstract: made at 890cm^{-1} (in cyclohexane or in CS_2). A standard preparation is obtained from the raw I by subjecting the latter to molecular fractionation conducted at approximately 10^{-3}mm Hg abs. pressure and at $64-77^\circ$ temperature. Pure I is obtained in the subsequent chromatography, employing neutral Al_2O_3 as adsorption medium. Pure I is contained in a fraction desorbed in the $75-77^\circ$ range. II is synthesized by thermally decomposing Phytol ester of oxalic acid at $130-140^\circ$ and at 10mm Hg abs pressure. After fractionation the mixture is purified over neutral Al_2O_3 , and displaced with petroleum ether. For the determination of I, a modified quantitative acetylation method has been developed that employs pyridine medium. A sample

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CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Organic Substances.

E-3

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57240.

Abstract: of approx. 0.3gr of I is treated with 1.5gr of 12% solution of acetic anhydride in anhydrous pyridine and heated on a steam bath for 10 minutes. The cooled solution is then diluted with 10cc of water and titrated with 0.5 n NaOH solution until a stable pink color (phenolphthalein) of the solution is obtained. Accuracy of the result of both determinations coincides with that of the spectroscopical method ($\pm 3.0\%$).

Card 3/3

KRAUS, E.

CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Author : V - Jiri Korbl, Bohumil Kakac; VI - Jiri Korbl,
Rudolf Pribil; VII - Jiri Korbl, Eduard Kraus,
Rudolf Pribil.

Inst : -

Title : Metallochromic Indicators. V. Properties of Methyl-
thymol Blue as of Acid-Base Indicator. VI. Analogues
of o-Cresolphthalein Complexon. VII Glycinethymol
Blue.

Orig Pub: Chem. listy, 1957, 51, No 9, 1680-1685; No 10, 1804-
1808; 1809-1813.

Abstract: The behavior of methylthymol blue (I, 3,3'-bis-N,

Card 1/11

CZECHOSLOVAKIA / Analytic Chemistry. General Topics. E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: N-di-(carboxymethyl)-aminomethylthymolsufonephthalin) as of an acid-base indicator was studied potentiometrically and by the spectrophotometric method. As compared with thymol blue (II) - initial compound of I - the acid-base reactions of I are more complicated in consequence of the presence of six H atoms, which are able to dissociate, and of the possibility of formation of intramolecular H bridges. The potentiometric titration curve of free I acid prepared of Na salt of I on FN cathionite has 2 jumps; the consumption of the volumetric NaOH solution before the 1st jump is 3 times greater than the consumption between the 1st and the 2nd jumps. The color change of the yellow I solution into the light-blue one starts only after the 1st jump, i.e., after the addition of the 4th equi-

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CZECHOSLOVAKIA / Analytic Chemistry. General Topics. E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: valent of NaOH. It may be assumed from the shape of the titration curve that the values of pK_1 to pK_3 of I under 4.5 are close one to another; the corresponding proton detachment of I proceeds without any color change. The magnitude of pK_4 may be assumed to be 7.3. The light absorption curves of $8 \cdot 10^{-5}$ M solution of I at various pH-s within the range from 5 to 14 are crossing at isobestic points in the majority of cases and depending on the light wave length, which indicates simple equilibria of the corresponding I ions. The values of $pK_4 = 7.2$, $pK_5 = 11.15$ and $pK_6 = 13.4$ were obtained from the course of the extinction curve of a 8 .

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CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: ties of 3,3'-bis-N,N-di-(carboxymethyl)-aminomethyl derivatives of phenolphthalein (phenolphthalein complexon, III) and thymolphthalein (thymolphthalein complexon, IV) were studied and a comparison with the analogous derivative of o-cresol-phthalein (o-cresolphthalein complexon, V was carried out). Schwarzenbach and his coworkers proposed V as an indicator for complexometric determination of alkali-earth metals. The regions of color changes of III, IV and V depending on pH coincide with the regions of corresponding initial acid-base indicators according to spectrophotometric measurements. But the weak coloration of III, IV and V appears

Card 5/11

CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: already at pH = 7 to 8; it becomes more intensive with the rise of pH in consequence of the formation of colored ions. The color intensity of individual forms depends on the fact, whether a symmetrical, or an asymmetrical resonance system is being produced, at which occasion it is necessary to take into consideration the hydrogen bridges between the phenol O-s and N atoms. The alkaline form of III is purple, that of IV is blue, and that of V is violet. A qualitative color change from blue into reddish-gray is observed in IV near pH = 12. The color of III becomes weaker at pH = 13 to 14 analogously to the initial indicator. The least and, consequently, the most favorable intensity rise of the coloration proper together with pH is observed at IV. III, IV and V possess

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62

CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556

Abstract: the metallochromic properties only in an alkaline medium contrarily to analogous derivatives of sulfo phthaleins. I with Ca^{2+} , Sr^{2+} , and Ba^{2+} produces colored reactions. Many other cations cause blocking of III connected with its discoloration; a blocked III does not react with cathions, with which it would produce a positive reaction otherwise. IV and V behave similarly, but cases of their blocking occur more seldom. The positive color reaction of III, IV and V with Ca^{2+} are still clear enough at pH = 9, but with Sr^{2+} and, first of all, with Ba^{2+} they are already expressionless. To the contrary, the intensity of III coloration

Card 7/11

CZECHOSLOVAKIA / Analytic Chemistry. General Topics. E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: in strongly alkaline solution is decreased by the interaction with Ca^{2+} . The functional range of IV as of a metallochromic indicator is shifted to the more alkaline medium in comparison with V, which is of advantage at the complexometric determination of Sr and Ba. Besides, solutions titrated with IV as indicator are practically colorless in the optimum range of pH (high NH_4OH concentrations or little amounts of NaOH). Consequently, IV is more suitable as an indicator than V.

VII. A new metallochromic indicator, glycinethymol blue (VI, 3,3'-di-(N-carboxymethylaminomethyl)-thymolsulfonephthalein) was prepared by elimination of a N-carboxymethyl group from 1-oxy-2-N,N-di-(carboxymethyl)-aminomethylaryl complex producing

Card 8/11

CZECHOSLOVAKIA / Analytic Chemistry. General Topics. E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: groupation in combination with II. Its preparation by the condensation of II with formaldehyde and glycine is similar to the preparation of I. The Na salt of VI is a dark brown powder easily soluble in water. The first acid-base transition of VI from a yellow coloration into a red one is shifted to the range of lower pH magnitudes as compared with II (pH = 2.8 to 1.2). The second transition of VI color (yellow - blue) takes place approximately in the same range of pH as in case of I; the intensity decrease of the blue coloration is not clear enough at high values of pH in the case of VI. The complex formation properties of

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CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: VI are lower as compared with I or other similar indicators (Ni^{2+} , Fe^{3+} and Pd^{2+} produce complexes). Starting from pH = 3. VI produces complexes of dark blue color with numerous cations at various pH magnitudes. At the titration with ethylenedinitrilotetraacetic acid (VII) solution, the color transitions are clear in the case of Cu^{2+} , Zn^{2+} , Pb^{2+} and Hg^{2+} , and they are lengthy in the case of Pd^{2+} , Ni^{2+} , Co^{2+} and Fe^{3+} . The application of VI is practically important first of all for the direct complexometric determination of Cu^{2+} in an acid medium; VI is suitable for that purpose more than 1-(2-pyridylazo)-2-naphthol or variamine blue B first of all because the Cu complex is well soluble and due to the clear change of color. Method of work: a corresponding volume of 0.05 M

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CZECHOSLOVAKIA / Analytic Chemistry. General Topics.

E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60556.

Abstract: solution of the sample (CuSO_4) is diluted to 100 ml and 1 ml of 1 n. HNO_3 , 5 to 10 drops of 0.1% aq. solution of VI (Na salt) and 3 ml of 20% aq. hexamethylenetetramine are added. The intensively blue solution of pH about 5 is titrated with a 0.05 M VIII solution until a pure yellow or emerald green color is produced (depending on the Cu content). Ni^{2+} and Fe^{3+} interfere. See report IV in RzhKhim, 1958, 53348.

Card 11/11

HUSKA, A.M., promovany ekonom; KOVAL, S., dr.; KRAUS, E.

Enterprise internal units, their role and development in
the building industry. Inz stavby 12 no.8:353-358 Ag '64.

BRUUL, 1961

(Ugiovine a. line)

Sensitive measurement of small temperature changes. W. cas fya
14, no. 28100-104, 1964

PORADOVSKY, Karol, Dr.; KRAUS, Eugen, Dr.

Treatment of transverse presentation. Cesk. gyn. 22/36 no.1-2:
73-80 Feb 57.

1. Gyn. por. odd. KUNZ v Ziline, prednosta: Dr. Karol Poradovsky.
(LABOR PRESENTATION,
transverse, management (Cs))

KRAUS, Evzen; DVORAK, Jindrich.

Allergy and immunity in infants after oral BCG vaccination according to de Assis method. Gruzlica 23 no.4:227-234 Apr. '55.

1. Z Oddzialu Gruzlicy. Ordynator: dr med. Evzen Kraus. i z Oddzialu Dzieciecego Ordynator: dr med. Jindrich Dvorak Szpitala w Moscie (Czechoslowacja)

(BCG VACCINATION, administration

oral, de Assis method, in inf., eff. on allergy & immun.)

(TUBERCULIN REACTION

eff. of BCG vacc. orally administered according to de Assis method on allergy & sensitivity in inf.)

KRAUS, E.G., inzh.; TULIN, V.S., prof. (Moskva)

Electric drives and automatic control in mining. Elektrichestvo
no.8:86-91 Ag '63. (MIRA 16:10)

1. Karagandinskiy gosudarstvennyy inzhenerno-proyektnyy institut
po proyektirovaniyu shakhtnogo stroitel'stva Karagandinskogo
ugol'nogo basseyna (for Kraus).

KRAUS, E.G., inzh.; BATIN, A.P., inzh.

Apparatus for the remote measuring of strains in machine parts.

Izv. vys. ucheb. zav.; gor. zhur. 6 no.10:139-146 '63.

(MIRA 17:2)

1. Karagandinskiy politekhnicheskiy institut.

KRAUS, E.G., inzh. (Karaganda)

Creation of a powerful drive, which can be regulated, for
automatic mining machines. Ugol' 38 no.6:33-34 Ja '63.
(MIRA 16:8)

(Coal mining machinery—Electric driving)
(Automatic control)

KRAUS, E.G.; ZUBOV, B.S.; SOBOLEV, V.G.

New flexible shielded cables and their use in Karaganda
mines. Nauch. trudy KNIUI no. 11:110-124 '62. (MIRA 17:7)

KRAUS, E.G.; RUBINSHTEYN, B.Sh.

Intermediate relays of explosion-proof magnetic starters.
Nauch. trudy KNIUI no. 11:124-129 '62.

Some reasons for the corrosion of mine starters. Ibid. s133-137
(MIRA 17:7)

KRAUS, E.G.; RUBINSHTEYN, B.Sh.; V'YUNIK, M.V.

Operation of test samples of the PMVI-3 starter. Nauch. trudy
KNIUI no. 11:129-133 '62. (MIRA 17:7)

KENOS, E.G.; VASILYEV, N.M.; KADYUSHA, S.S.

Service of power engineering workers in the USSR. 1964. 19 no. 3: 55-56. 4p. 164.

KRAUS, E.G., inzh.

Regulated d.c. drive for use in coal min. . Elektrichestvo no.7:
55-56 J1 '65. (MIRA 17:11)

I. Karagandinskiy gosudarstvennyy inzhenerno-proektnyy institut po
proyektirovaniyu shakhtnogo stroitel'stva Karagandinskogo ugol'nogo
basseyna.

KRAMS, E.G., Inzh. (Karaganda)

Protection of low voltage a.c. and d.c. lines from
short-circuits. Elektricheskoe stroitel'stvo, 1957, No. 4, p. 14.

(MIRA 1957)

BYR'KA, V.F.; KRAUS, E.G.; TOMILIN, N.F.; PARFENOV, V.V.; FOMINYKH, F.D.

Experimental stoping cutter-loader with a regulated d.c.
drive. Nauch. trudy KNIUI no.15:23-40 '64. (MIRA 18:8)

KPAUS, E.G.; SOBOLEV, V.G.; ZUBOV, B.S.

Life of flexible shielded cables for cutter-loader drives.
Nauch. trudy KNIUI no.15:51-55 '64. (MIRA 19.8)

ZUPOV, B.S.; KRAUS, E.G.; DENIS, V.K.

Remote control communication line in a mine section cable
system. Nauch. trudy KNIUI no.15:381-393 '64. (MIRA 18:8)

VRATIL, L.; KRAUS, F.

Automatic grinding machine for rough structure of railway cars.
Stroj vyr 9 no.5:259 '61.

1. Vagonka Tatra, Smichov.

KRAUS, F.

RAZUM, J.; KRAUS, F. "Waste lime carbide, a cheap raw material for production of hyperchloride of calcium in wood-pulp factories." p. 210. (Papir A Celulosa. Vol. 8, no. 10, Dec. 1953. Praha.)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Congress, June 1954.
Uncl.

L 33231-66 EWP(j) RM

ACC NR: AP6023844

SOURCE CODE: CZ/0043/65/000/009/0715/0722

AUTHOR: Cerny, Mirko--Cherny, M. (Engineer; Candidate of sciences; Prague); Kraus, Felix (Engineer; Prague); Ettel, V. ²³

ORG: Laboratory for Wood Research, Institute for the Theoretical Basis of Chemical Technology, Czechoslovak Academy of Sciences, Prague (Ústav teoretických základů chemické techniky Československé akademie věd, Laborator výzkumu dřeva)

TITLE: Distillable phenolic substances obtained in the methanolysis of wood¹⁵ (I)

SOURCE: Chemické zvesti, no. 9, 1965, 715-722

TOPIC TAGS: distillation, phenol, paper chromatography, chemical separation, wood chemical product

ABSTRACT: Methanolysis of spruce wood yields phenolic substances that can be recovered by distillation; about 1% is obtained in the distillate form. This mixture contains: alpha-methoxypropio-guaiacone, vanilloylacetyl, alpha-methoxyguaiacylacetone, guaiacyl-acetone, alpha-hydroxypropio-guaiacone, vanillin, vanillic acid, and its methylester. The separation of this mixture by paper chromatography, and by chromatography on a thin layer of Al_2O_3 is described. Orig. art. has: 4 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 30Nov64 / ORIG REF: 002 / OTH REF: 016

Card 1/1 *plw*

092

1588

POPESCU, M.P.; GRADINA, C.; CHIHAI, Victoria; CINCA, N.; KRAUS, Floreta;
CONSTANTINIDIS, Angela; PASCU, V.; ALITESCU, Constanta; CAZACEANU,
Ecaterina

Ophthalmic angiodynamics in conditions of fluorescent illumination.
Stud. cercet. fiziol. 10 no.3:273-280 '65.

SPIEWAK, Florian, dr.; KRAUS, Gabriel, mgr.; KARMANSKI, Henryk, mgr.; GREGOROWICZ, Stanislaw

Structure of the working crew of the 1 Maja coal mine of the Rybnik Coal District. Glow inst gorn prace no.343/351:119-139 '64.

1. Central Mining Institute, Katowice.

KRAUS, H.

Lenticonus anterior. Sborn. lek. 62 no.7-8:198-202 J1 '60.

1. II. oční klinika fakulty všeobecného lékařství University
Karlovy u Praze, přednosta akademik Jaromír Kurz.
(LENS CRYSTALLINE abnorm.)

KRAUS, H.

Acromegaly and glaucoma. Cesk.ofth.17 no.1:64-69 Ja '61.

1. II. oční klinika KU v Praze, přednosta akademik J.Kurz.
(GLAUCOMA compl)
(ACROMEGALY compl)

KRAUS, H.; MYŠKA, V.

Diseases of the retinal vessels in clinical material. Cesk.ofth.
17 no.2:119-128 Mr '61.

1. II. oční klinika KU v Praze, přednosta akademik Jaromír Kurz.
(RETINA blood supply)

KREJCI, Lubomir; KRAUS, Hanus

Our clinical experiences with the miotic syntostigmin of Czechoslovakian origin. Cesk. ofth. 17 no.6:468-472 S '61.

1. II oční klinika KU, přednosta akademik J. Kurz.

(MIOTICS ther) (GLAUCOMA ther)

S/196/62/000/014/037/046
E194/E155

AUTHOR: Kraus, H.

TITLE: Determination of the critical span for bimetallic
conductors

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.14, 1962, 15-16, abstract 14 E 107. (Elektrotechnik
und Maschinenbau, v.78, 1961, no.23, 681-684) (German).

TEXT: The calculation of composite bimetallic conductors is
usually carried out "with the use of insulating polyethylene"
[Abstractor's note: This is obviously a misprinted line with a
part of the sentence missing. According to the quoted Russian
reference the text could read ... "carried out by means of
approximate equations".] ... into which values of the modulus of
elasticity, temperature coefficient of expansion, and Young's
modulus are assumed relative to the conductor as a whole.
Calculation of these values is based on a number of assumptions
and simplifications; therefore, in designing non-standard
conductors, because of the absence of experimental data the final
Card 1/2

Determination of the critical ...

S/196/62/000/014/037/046
E194/E155

results are in doubt, particularly the value of the critical span. Accurate calculations have shown that the critical span exceeds the value of the span calculated by approximate methods by only 3%. For practical purposes approximate formulae are sufficiently accurate (for example, that given in the Austrian 'Guidance for Overhead Transmission Lines OVE-L1'). See also Ekspress-Informatsiya, series "Elektricheskiye Stantsii, seti i sistemy", no.10, 1962, ref.31.

[Abstractor's note: Complete translation.]

Card 2/2

KLENKA, L.; KRAUS, H.,

Correlation between biochemical findings and vascular changes in the fundus oculi in arteriosclerosis. I. Stages of field studies. Sborn. lek. 64 no.8/9:225-233 Ag '62.

1. II. oční klinika fakulty všeobecného lékařství Karlovy university v Praze, přednosta akademik J. Kurz.
(ARTERIOSCLEROSIS diag) (FUNDUS OCULI)

KOHOUTEK, J.; KRAUS, H.; MYSKA, V.

Developmental anomalies of the face and concomitant strabismus.
Cesk. oftal. 19 no.1:14-17 Ja '63.

1. II. oční klinika fakulty všeobecného lékařství KU v Praze,
prednosta akademik J. Kurz.
(STRABISMUS) (FACE)

KRAUS, H.; KLENKA, L.

Correlation of sclerotic changes in the heart and findings on the eye ground blood vessels. (Results of the 1st stage i in blood vessel research). Sborn. lek. 65 no.8/9:235-243 Ag '63.

1. II oční klinika fakulty všeobecného lékařství University Karlovy v Praze, přednosta akademik J. Kurz.

(HEART DISEASES) (CORONARY DISEASE)
(ELECTROCARDIOGRAPHY) (OPHTHALMOSCOPY)
(HYPERTENSION) (RETINAL VESSELS)
(FUNDUS OCULI)

KAREL, I.; KREJCI, L.; KRAUS, H.

Our experiences with the choice of anesthesia in eye surgery.
Cesk. oftal. 20 no.1:44-51 Ja'64.

1. II. oční klinika fakulty všeobecného lékařství KU v Praze;
prednosta: akademik J. Kurz.

*

KRAUS, H.

On prolonged administration of acetazolamide in glaucoma.
Report from practice. Cesk. oftal. 20 no.1:63-66 Ja'64.

1. II. oční klinika fakulty všeobecného lékařství KU v
Praze; přednosta: akademik J. Kurz.

*

KRAUS, H.

Cataract extraction in glaucoma patients. Cesk. oftal. 21
no.2:116-120 Mr '65.

1. II. oční klinika fakulty všeobecného lékařství Karlovy
University v Praze (prednosta: akademik J. Kuz).

KARL, I.; HODER, J.; KRAUS, H.; KREJCI, L.; KRUSINA, L.

Tonometry during general anesthesia with endotracheal intubation. Cas. lek. cesk. 104 no.25:676-682 25 Je. 5.

1. II. oční klinika fakulty všeobecného lékařství Karlovy University v Praze (prednosta: akademik J. Kurz) a Oddelení pro anestezii Krajského ústavu národního zdraví, Středočeského kraje (vedoucí: MUDr. J. Hoder).

KLENKA, L.; KRAUS, H.; PUCHMAYER, V.

Correlation between the cholesterol-phosphatide index of the serum and atherosclerotic changes in the fundus oculi. Cas. lek. cesk. 104 no.27/28:767-771 9 J1 '65.

I. II. oční klinika fakulty všeobecného lékařství Karlovy University v Praze (prednosta akademik J. Surz), Oční oddělení fakultní polikliniky v Praze (vedoucí doc. dr. L. Klenka, CSc.) a IV. interní klinika fakulty všeobecného lékařství Karlovy University v Praze (prednosta prof. dr. M. Fucik, DrSc.).

REINIS, Z.; BAZIKA, V.; HEYROVSKY, A.; HORAKOVA, D.; SULC, M.; SOUKUPOVA, K.;
PUCHMAYER, V.; KLENKA, L.; KRAUS, H.

Epidemiology of atherosclerosis in the agricultural population
of Northern Bohemia. Cas. lek. cesk. 104 no.38:1029-1034 24 S '65.

1. Angiologicka laborator fakulty vseobecneho lekarstvi Karlovy
University v Praze (vedouci prof. dr. Z. Reinis, DrSc.), IV. interni
klinika fakulty vseobecneho lekarstvi Karlovy University v Praze
(prednosta prof. dr. M. Fucik, DrSc.) a II. oční klinika fakulty
vseobecneho lekarstvi Karlovy University v Praze (prednosta akademik
J. Kurz).

~~REPORT. Research Center of the Academy of Sciences of the USSR~~

KRAUS, I.: "The detection and colorimetric determination of small quantities of vanadium after chromatographic isolation from accompanying elements." Leningrad, 1955. Leningrad Order of Lenin State University named A. A. Zhdanov. (Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Knizhnaya Letopis' No. 47, 19 November 1955. Moscow.

Country : ROMANIA T
 Category : Human and Animal Physiology.
 Blood Circulation. The Heart.
 Abs. Jour. : Ref Med-Biol., No 23, 1956, 106418
 Author : Sadarnu, G.; Brown, A; Evans, I.
 Institut. : AS Rumania, Iasi Branch of Medicine.
 Title : Phonocardiographic Studies on Atrial Sounds in
 Cases of Complete Atrioventricular Dissociation.
 Orig Pub. : studii si cercetari stiinc. Acad. RPR Fil.
 Iasi. Med., 1956, 7, No 1, 77-86
 Abstract : In cases of complete atrioventricular dissociation, dichotomy of atrial sounds is observed. The first component corresponds to the a-wave of the mechanogram of the heart's apex and is connected with the flow of blood from the atrium into the ventricle. The second component corresponds to the small negative protodiastolic wave of the mechanogram and is connected with the elastic reaction of the dilated ventricle. When systoles of the atrium and ventric-

Card: 1/2

Country : ROMANIA
 Category= : Human and Animal Physiology.
 Abs. Jour. : Blood Circulation. The Heart.
 : Ref Zhur-Biol., No 23, 1966, 106418

T

Author :
 Institut. :
 Title :

Orig. Pub. :

Abstract :
 (cont)

les coincide, a modified atrial sound may be distinguished. As the P-wave appears at the end of the QRS complex or at the beginning of ST, frequency, amplitude, and duration of the I sound become modified. -- from the authors' summary.

Card: 2/2

43

Country	: RUMANIA	
Category	: Human and Animal Physiology. Blood Circulation, the Heart.	T
Abs. Jour.	: Rec Zhur-Fiol., No 28, 1958, 106419	
Author	: Badarau, G.; Braun, A.; Kravus, E.	
Institut.	: AS Rumania, Iasi Branch of Medicine.	
Title	: Phonocardiographic Studies of Systolic Sounds in Cases of Complete Atrioventricular Dissocia- tion.	
Orig Pub.	: Studii si cercetari stiint. Acad. RPR Fil. Iasi Med., 1956, 7, No 1, 87-101	
Abstract	: No abstract.	

Card: 1/1

KOCHANOVSKA, A.; KRAUS, I.; MARSAK, Z.

On X-ray measurement of macroscopic stresses in sintered carbides. Chekhosl fiz zhurnal 13 no. 6: 418-423 '63.

1. Ustav fyziky pevných látek, Československá akademie věd, Praha (for Kochanovska)
2. Fakulta technické a jaderné fyziky, České vysoké učení technické, Praha (for Kraus and Marsak)

L 63372-65 ENT(m)/ENP(w)/ENP(i)/EIR/ENP(t)/ENP(b) IJP(c) JD/HN/EM

ACCESSION NR: AP5013938

CZ/0055/65/015/005/0367/0371

AUTHOR: Kraus, I.

TITLE: Thermal stresses in WC-Co₂₇ sintered carbide₂₇ alloys with a mean WC grain size of 2.2 μ and 3 μ

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 15, no. 5, 1965, 367-371

TOPIC TAGS: thermal stress²⁸, thermal expansion coefficient, tungsten carbide, cobalt, alloy structure, carbide skeleton, cobalt film₂₈, sintered carbide, sintered alloy

ABSTRACT: The structure and thermal stresses in WC-Co alloys has been studied because the available data on this subject are inconsistent. The experiments were carried out on WC-Co samples with a mean WC grain size of 2.2 μ and 3 μ , and with oriented microstresses produced by the difference in the thermal coefficients of expansion. Measurements of the thermal stresses in WC-Co alloys containing 6-25 wt.% cobalt show that the actual structure of the alloys is something in the nature of a transition from a carbide skeleton to a cobalt film. A continuous carbide skeleton exists in WC-Co systems containing less than 15 wt.% cobalt. Above this

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L 63372-65

ACCESSION NR: AP5013938

3
limit the continuity is lessened and the skeleton disintegrates into individual grains and is surrounded by the binder phase. "The author thanks A. Kokhanovskiy, Dr. of Sciences, of the IFTI Czechoslovak Academy of Sciences in Prague, for his interest in the present study." Orig. art. has: 2 figures, 1 formula, and 2 tables.

ASSOCIATION: Faculty of Technical and Nuclear Physics, Czech. Techn. University, Prague

SUBMITTED: 17Dec64

ENCL: 00

SUB CODE: MM, SS

NO REF SOV: 001

OTHER: 009

Card *dm*
2/2

KRAUS, Ivan

Instruction course on remote control of cranes. Poz stavby 12 no.10:
451 '64.

L 37065-66 EWP(e)/EWP(t)/ETI IJP(c) AT/WH/JD/HW/JG
 ACC NR:AP6007140 (N) SOURCE CODE: CZ/0091/65/000/002/0019/0031 60
 59
 B

AUTHOR: Kraus, Ivo (Graduate physicist)

ORG: Department of Technical and Nuclear Physics, CVUT, Prague (Fakulta technicka a jaderne fyziky CVUT)

TITLE: Thermal stresses in tungsten carbide base cemented carbides

SOURCE: Pokroky praskove metalurgie VUPM, no. 2, 1965, 19-31

TOPIC TAGS: carbide, internal stress, tungsten, tungsten base alloy, tungsten carbide, thermal stress

ABSTRACT: The purpose of this article is to review and discuss the main conclusions concerning thermal stresses in cemented carbides which are to be drawn from the principle studies of this problem. Only a few investigators have published the results of the experimental and theoretical studies which have been made of the problem of thermal stresses in WC-Co cemented carbides. The results to date are insufficient in number, and there isn't even a single interpretation of the results available. Among other things, the experimental results of investigations of microscopic internal stresses in carbides obtained to date show that when the Co content

Card 1/2

L 37065-66

ACC NR: AP6007140

is less than 15% there exists in the system WC-Co a cohesive carbide skeleton. When the Co¹ content increases, the cohesion of the skeleton drops and it begins gradually to break up at the individual grains of the continuous phase. Orig. art. has 7 figures, 2 tables and 1 formula.

SUB CODE: 11,20/ SUBM DATE: none/ ORIG REF: 001/ SOV REF: 001/ OTH REF: 008

ns
Card 2/2

KRAUS, Ivo; MAJSAK, Jirsek

Problem of determining the magnitude and direction of main stresses by X-ray diffraction. In: Scripta 14 no.2887-93 161

1. Pokultu te podrobněji a jasněji vysvětlit techniku měření.

KRAUS, Ivo (Prague)

Lattice defects of plasticity deformed metals from the viewpoint
of plantgeographic methods. Pokroky mat. fys. este 9 no.5:293-298
1964.

KRAUS, I.P.; DEREVYANKIN, V.A.; KUZNETSOV, S.I.

Solubility of sodium aluminosilicate hydrates in caustic soda
solutions. TSvet. met. 38 no.5:46-51 My '65.

(MIRA 18:6)

KRAUS, J.

Ten years of Czechoslovak ore mining and its future development. p. 129.
RUDY, Praha, Vol. 3, no. 5, May 1955.

SO: Monthly List of East European Accessions, (SEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

KRAUS, J.

Introduction of cost accounting at the Viliam Pit. p. 306.

RUDY Vol. 3, no. 10, Oct. 1955

Czechoslovakia

Source: EAST EUROPEAN LISTS Vol. 5, no. 7 July 1956

CZECHOSLOVAKIA/Solid State Physics - Structural Crystallography. E

Abs Jour : Ref Zhur Fizika, No 8, 1959, 17838

Author : Kraus, J.

Inst : -

Title : Determination of the Orientation with the Aid of Lauegrams

Orig Pub : Jerna mech. a opt., 1958, 3, No 6, 196-199

Abstract : No abstract.

Card 1/1

- 60 -

KRAUS, J., inz. CSc. (Prague); TYC, P., doc. inz. CSc. (Prague)

Porous drainage pipes. Stavivo 42 no.9:333-334 S '64.

AUTHOR: Kraus, Jaroslav CZECH/37-59-3-17/29

TITLE: The Dependence of the Dielectric Constant of ADP on the Temperature (Letter to the Editor)

PERIODICAL: Československý časopis pro fysiku, 1959, Nr 3, p 321

ABSTRACT: Twenty samples of ADP were cut in orientations Z, X, Y, S (defined as in the work of A.C. Walker - Ref 4) with an accuracy of 1° . Silver or aluminium electrodes were deposited on the samples. The temperature, in the range 20 to 80°C , was kept constant to 0.1°C . The measurements were carried out on a capacitative bridge and the influence of the leads and the edges was considered. $\epsilon_x = \epsilon_y$ and ϵ_z at 20°C was found in good agreement with the work of Bronnikova, Staviŭskiy - Ref 3. ϵ reached a minimum at 50°C and then increased again in contrast to the results reported in the work of W.P. Mason (Refs 1,2). $\text{tg } \delta$ changed from 0.005 to 0.8 for a Z-cut, from 0.007 to 1.27 for X and Y-cuts and from 0.006 to 0.45 for S-cuts, within the range 20 to 80°C .
 Card1/2 The accuracy was $\pm 5\%$ for ϵ and $\pm 15\%$ for $\text{tg } \delta$. ✓

CZECH/37-59-3-17/29

The Dependence of the Dielectric Constant of ADP on the Temperature
(Letter to the Editor)

There are 1 figure and 4 references, of which 1 is Soviet
and 3 are English.

ASSOCIATION: Výzkumný ústav pro minerály, Turnov (Research
Institute for Minerals, Turnov)

SUBMITTED: November 15, 1958



Card 2/2

9.2.80

9,2/81

Z/037/62/000/002/006/015
E024/E135

AUTHOR: Kraus, Jaroslav

TITLE: Measurement of vibrations of spherical resonators

PERIODICAL: Ceskoslovenský časopis pro fysiku, no.2, 1962,
139-143

TEXT: Van Dyke studied the vibrations of spheres in 1926 and the present author has extended these studies. Spherical resonators of various diameters were ground from natural quartz and were surrounded by six electrodes, arranged in a circle. The resonant frequencies were independent of the orientation of the sphere relative to the electrodes. The frequencies were measured by the "click method" due to Cady. A large number of resonant frequencies were found, which followed the relation

$$f = \frac{k}{d}$$

where: d is the diameter of the sphere in mm, f is the frequency in kc/sec, and k is the frequency-constant of the appropriate vibration. The fundamental frequency has the
Card 1/2

Measurement of vibrations of ...

Z/037/62/000/002/006/015
E024/E135

constant $k = 2760 \frac{\text{kc}}{\text{sec}} \text{ mm}$. The author further studied the vibrations of spherical resonators made from primary ammonium phosphate (ADP) and from the semihydrates of normal potassium tartrate (DKT). The fundamental frequencies of these resonators are given by $k = 1592 \text{ kc/sec.mm}$ for ADP and $k = 3559 \text{ kc/sec.mm}$ for DKT. The author considers the further study of spherical resonators of considerable interest because of the simple relationship between frequency and diameter and because of the small surface of the resonators, which might ensure long life. There are 4 figures and 5 tables.

ASSOCIATION: Výzkumný ústav pro minerály, Turnov
(Research Institute for Minerals, Turnov)

SUBMITTED: November 27, 1961

Card 2/2

8/276/63/000/001/022/028
A006/A101

AUTHORS: Kraus, Jaroslav, Hrbek, Antonin

TITLE: Comparison of acid and basic electric steel as to their mechanical properties and economical efficiency

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 1, 1963, 8, abstract 1051 ("Slévárenství", 1962, v. 10, no. 7, 259 - 261, Czech)

TEXT: Information is given on experiments of a section steel casting shop at the ČKD plant (Praha, ČSSR), where one of the 5-ton electric arc furnaces with 1,875 kvamp transformers and stuffed lining of a water glass and sand mixture by the Barin method was converted to the acid process. Heats are produced with iron ore oxidation, intensive bubbling without diffusional reduction of the slag with C and limited reduction with Si. In the furnace the steel is deoxidized with 75% Fe-Si and 75% Fe-Mn. Final deoxidation proceeds in the ladle. For comparison, two grades of steel were melted in one basic and one acid 5-ton furnace, 1,875 kvamp each. The results of mechanical tests were statistically

Card 1/2

Comparison of acid and basic electric steel...

S/276/63/000/001/022/028,
A006/A101

processed. It was established that in acid steel σ_s , σ_b , δ_5 , and ψ are on the average lower by 10% than in basic steel but above standard values. Acid steel which is by 50°C hotter than basic steel, fills the mold better. The efficiency of an acid furnace is on the average by 49% higher; specific power consumption is by 21% lower, and losses by 12% lower than in a basic furnace. Acid steel is on the average by 25% cheaper. The acid furnace is fed with scrap, pure in respect to P and S, i.e. wastes from basic heats.

Ya. Polyakov

[Abstracter's note: Complete translation]

Card 2/2

Z/508/60/000/000/012/018
E192/E335

AUTHOR: Kraus, Jaroslav

TITLE: Oscillations in rings

SOURCE: III. Konference o monokrystalech. Prague. Výzkumný ústav pro minerály, 1960. 168 - 176

TEXT: The article describes an investigation of the oscillations in quartz rings. The simplest type of oscillations in quartz rings are radial oscillations, where all the points oscillate simultaneously in the radial direction and the frequency is given by the Love formula:

$$f_r = \frac{1}{2\pi r_m} \sqrt{\frac{E}{\rho}} \cdot \sqrt{1 - n^2} \quad \text{for } n = 0$$

where $r_m = (r_a + r_i)/2$, r_a - external diameter, r_i - internal diameter, E - Young modulus, ρ - density and n - number of oscillations. The formula is valid for thin rings; for rings of finite length and thickness a more accurate equation should be used.

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Oscillations in rings

Z/508/60/000/000/012/018
E192/E335

The second type of oscillations are the circumferential, longitudinal oscillations, whereby the circumference of the ring is partly extended and partly contracted. Torsion oscillations form a whole group and their frequency is given by:

$$f_{tr} = \frac{1}{2\pi r_m} \sqrt{\frac{E}{\rho}} \sqrt{\frac{n^2 + 1 + \sigma}{2(1 + \sigma)}}$$

In the case of radial displacements where tangential displacements have maxima in the nodes of the radial displacement and the axial displacements are zero, the rings produce flexural oscillations in the ring plane. The number of nodes is $2n$. In the case of flexural oscillations normal to the plane of the ring, the displacements are axial and the small tangential displacements have maxima in the nodes of the axial displacements. The radial displacements are then zero. The rings were investigated experimentally in passive circuits, i.e. the driving signal applied to the electrodes was equal to the mechanical frequency of the ring. The equipment used for this purpose consisted of an RC oscillator
Card 2/3

Oscillations in rings

Z/508/60/000/000/012/018
E192/E355

operating between 20 and 200 kc/s, a three-stage amplifier with a tuned output stage and an oscillograph and electrodes. The high-frequency voltage on the tuned circuit of the output stage was 700 - 1400 V. The electrodes were of various types, the simplest system being in the form of two rectangular plates; circular and split electrodes were also used. The total number of oscillation types in a ring varied between 40 and 80. These oscillations produced clearly defined nodes. An additional 10 - 20 oscillation types were observed but in this case either no nodes were observed or the exciting voltage was too low. The work is being continued. There is 1 figure.

ASSOCIATION: Výzkumný ústav pro minerály, Turnov
(Minerals Research Institute, Turnov)

Card 3/3

KRAUS, J., inz., C.So.; KUBICEK, B., inz.

Polysterene-Aerocem microconcrete. Stavivo 41 no.1:8-10
Ja '63.

1. Vyzkumny ustav dopravní, Praha (for Kraus). 2. Zelezniční
stavitelství, n.p., Praha (for Kubicek).

3 43584-65 ENT(1)/EPA(s)-2/EEC(t)/ Pt-7/P1-4 IJP(c) GG

ACCESSION NR: AT5009579

Z/0000/62/C00/000/0139/0140

AUTHOR: Kraus, J. (Kraus, Ya.)

21

36
35
5+1

TITLE: Temperature dependence of the dielectric constants of ADP

SOURCE: Konferencia o monokrystalech. 4th, Turnov, 1961. Sbornik referatov. Turnov, VUM, 1962, 139-140

TOPIC TAGS: dielectric constant, ADP crystal, dielectric loss, crystal condenser

ABSTRACT: New measurements of the temperature dependence of the dielectric constants in ADP condensers showed a different relationship than that given in previous works, which indicated a continuous decline. ADP crystals were sliced into three types of plates, designated Z, X (Y) and S in previous American papers. Twenty specimens were tested after orientation was determined to within 1°. These were coated with aluminum and held in a small furnace which permitted evaluation of their electrical properties at temperatures from 20 to 80C, maintained within variations of 0.1C. A capacitance bridge measured the dielectric loss, from which the dielectric constant was calculated. Results are given in tables and graphs. The basic value at 20C corresponds closely to that given previously by a Russian author (Bronnikova and Stavitskiy), but was found to reach a minimum at 50C and

Card 1/2

L 43584-65

ACCESSION NR: AT5009579

then to rise again, in contrast to other papers which reported a steady decline in dielectric constants with rising temperature. The dielectric loss between 20 and 80C ranged from 0.005 to 0.8 in Z crystals, from 0.007 to 1.27 for X(Y) crystals, and from 0.006 to 0.45 for S crystals. These $\tan \delta$ losses were gauged to an accuracy of $\pm 15\%$ and the constants to $\pm 5\%$. Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Vyzkumny ustav pro mineraly, Turnov (Mineral Research Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: 88, 8A

NO REF SOV: 001

OTHER: 003

Bj8
Card 2/2

LESNY, Ivan; KRAUS, Jaroslav; PFEIFFER, Jan

The extrapyramidal form of infantile cerebral palsy with predominant hypokinetic rigidity. Cesk. neur. 24 no.4:217-221 J1 '61.

1. Ustav pro lecení perinatálních encefalopatií, Státní lázeň Železnice, Jedlický dětský ústav, Praha.

(CEREBRAL PALSY)

LESNY, Ivan; KRAUS, Jaroslav; PFEIFFER, Jan

Dance therapy in infantile cerebral palsy. Cesk. neur. 24 no.4:230-234
Jl '61.

1. Ustav pro lecení perinatálních encefalopatií, Státní lázně Železnice,
Jedlický dětský ústav, Praha.

(CEREBRAL PALSY ther) (DANCING ther)

OTRADOVEC, Jiri; KREJCI, Lubomir; KRAUS, Jaroslav

Ocular motility changes in patients with early cerebral palsy.
Cesk. oftal. 18 no.3:217-222 My '62.

1. II oční klinika všeobecného lékařství KÚ v Praze, přednosta
akademik Jaromír Kurz Jedlický ústav pro tělesné vadné děti v
Praze.

(CEREBRAL PALSY compl)

(EYE dis)

L 3051-66 EWT(d)

ACCESSION NR: AP5026344

CZ/0088/65/000/001/0074/0084

AUTHOR: Kraus, Jiri (Graduate philologist)

TITLE: Coding and compression of written Czech

SOURCE: Kybernetika, no. 1, 1965, 74-84

TOPIC TAGS: coding, morse code, binary code, data transmission, information theory

Abstract [author's English summary, modified]: Some questions of economical transmission are discussed, on the basis of the letter frequencies in written Czech. In Section 1 the optimality of the Czech shorthand system is investigated by means of the correlation between letter frequencies and the graphical form of the signs; also the optimality of the Morse code and binary code, according to the method of Shannon and Fano. In Section 2 the possibilities are examined of reducing redundancy by substituting for letter combinations simpler signs in shorthand, telegraphic alphabet and binary code. Section 3 demonstrates the significance of word-frequency dictionaries in the economical transmission of information in natural languages. It is assumed that the most frequently used words could be reduced considerably. From the viewpoint of economical transmission, shorthand is better for written Czech than the Morse code.

Card 1/2

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L 3054-66

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Orig. art. has 3 formulas, 2 graphs and 1 table.

ASSOCIATION: Ustav pro jazyk c. sky CSAV, Prague (Institute of the Czech Language CSAV)

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SUB CODE: DP

NO REF SOV: 001

OTHER: 022

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Card 2/2

KRAUS, JOSEF

CZECHOSLOVAKIA/Processes and Equipment for Chemical Industries - K-1
Processes and Apparatus for Chemical Technology.

Abs Jour : Ref Zhur - Khimiya, No 2, 1957, 6934

Author : Kraus Josef

Inst :

Title : Technical Gases in Steel Cylinders

Orig Pub : Bezpecn. a hyg. prace, 1956, 6, No 7, 206-208

Abstract : No abstract.

Card 1/1

KRAUS, Josef, ing., C.Ss.

A new method of repairing sloping railroad handles. Teil dop
tach 10 no.9:576-577 '62.